one journal node, which enables all of the metadata received during a tracking window to be retrieved from the distributed file system. A service sorts the metadata into different data structures corresponding to each of one or more organizations that submitted metadata to the progress pipeline during the tracking window.

[0190] At **1608**, the data structure is processed to generate sorted metadata based on the class identifier and/or the context identifier. The sorting can also be based on a directory service identifier or an internal identifier. The operation at **1608** can be performed for each data structure created for the one or more organizations.

[0191] At **1610**, progress tracking information corresponding to the sorted metadata is retrieved from the remote database. The references included in the metadata can be utilized to request the progress tracking information from the remote database.

[0192] At **1612**, the progress tracking information is stored in a memory accessible by a report service. In some embodiments, the progress tracking information is de-referenced from the directory service identifier or internal identifier and a progress identifier replaces the directory service identifier or internal identifier in the metadata associated with the progress tracking information. The progress identifier and progress tracking information can be stored in a network-based storage service that is accessible by a report service. The network-based storage service may not be accessible by a client device except, indirectly, through the report service.

[0193] FIG. **17** illustrates a detailed view of an exemplary computing device **1700** that can be used to implement the various apparatus and/or methods described herein, in accordance with some embodiments. In particular, the detailed view illustrates various components that can be included in the computing devices illustrated in FIGS. **1** to **14** and/or described herein. For example, one or more of the server devices(s) **110**, client device(s) **120**, or any other device including any network devices and/or consumer electronics can include the components of computing device **1700**.

[0194] As shown in FIG. **17**, the computing device **1700** can include a processor **1702** that represents a microprocessor or controller for controlling the overall operation of computing device **1700**. The computing device **1700** can also include a user input device **1708** that allows a user of the computing device **1700** to interact with the computing device **1700**. For example, the user input device **1708** can take a variety of forms, such as a button, keypad, dial, touch screen, audio input interface, visual/image capture input interface, input in the form of sensor data, etc. Still further, the computing device **1700** can include a display **1710** (screen display) that can be controlled by the processor **1702** to present visual information to the user. A data bus **1716** can facilitate data transfer between at least a storage device **1740**, the processor **1702**, and a controller **1713**. The controller **1713** can be used to interface with and control different equipment through an equipment control bus **1714**. The computing device **1700** can also include a network/bus interface **1711** that couples to a data link **1712**. In the case of a wireless connection, the network/bus interface **1711** can include a wireless transceiver.

[0195] The computing device **1700** also include a storage device **1740**, which can comprise a single disk or a plurality of disks (e.g., hard drives), and includes a storage management module that manages one or more partitions within the storage device **1740**. In some embodiments, storage device **1740** can include flash memory, semiconductor (solid state) memory or the like. The computing device **1700** can also include a Random Access Memory (RAM) **1720** and a Read-Only Memory (ROM) **1722**. The ROM **1722** can store programs, utilities or processes to be executed in a non-volatile manner. The RAM **1720** can provide volatile data storage, and stores instructions related to the operation of the computing device **1700**.

[0196] As described above, one aspect of the present technology is the gathering and use of data available from various sources to track progress of students at completing assignments. The present disclosure contemplates that in some instances, this gathered data may include personal information data that uniquely identifies or can be used to contact or locate a specific person. Such personal information data can include demographic data, location-based data, telephone numbers, email addresses, twitter ID's, home addresses, data or records relating to a user's health or level of fitness (e.g., vital signs measurements, medication information, exercise information), date of birth, or any other identifying or personal information.

[0197] The present disclosure recognizes that the use of such personal information data, in the present technology, can be used to the benefit of users. For example, the personal information data can be used to improve the instructional experience of individuals attending a school. Accordingly, use of such personal information data enables instructors to tailor their lessons or individual attention to students' needs. Further, other uses for personal information data that benefit the user are also contemplated by the present disclosure. For instance, health and fitness data may be used to provide insights into a user's general wellness, or may be used as positive feedback to individuals using technology to pursue wellness goals.

[0198] The present disclosure contemplates that the entities responsible for the collection, analysis, disclosure, transfer, storage, or other use of such personal information data will comply with well-established privacy policies and/or privacy practices. In particular, such entities should implement and consistently use privacy policies and practices that are generally recognized as meeting or exceeding industry or governmental requirements for maintaining personal information data private and secure. Such policies should be easily accessible by users, and should be updated as the collection and/or use of data changes. Personal information from users should be collected for legitimate and reasonable uses of the entity and not shared or sold outside of those legitimate uses. Further, such collection/sharing should occur after receiving the informed consent of the users. Additionally, such entities should consider taking any needed steps for safeguarding and securing access to such personal information data and ensuring that others with access to the personal information data adhere to their privacy policies and procedures. Further, such entities can subject themselves to evaluation by third parties to certify their adherence to widely accepted privacy policies and practices. In addition, policies and practices should be adapted for the particular types of personal information data being collected and/or accessed and adapted to applicable laws and standards, including jurisdiction-specific considerations. For instance, in the US, collection of or access to certain health data may be governed by federal and/or state laws, such as the Health Insurance Portability and Account-